

THE GENUS *ABLAPTUS* STÅL
(PENTATOMIDAE: DISCOCEPHALINAE: DISCOCEPHALINI)

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Abstract.—Diagnoses are given for the genus *Ablaptus* Stål and the type species, *A. amazonus* Stål. Two new species, *A. brevirostrum* and *A. tavakiliani*, from Central America and French Guiana, respectively, are added to the previously monotypic genus.

The genus *Ablaptus* Stål is one of 32 genera in the tribe Discocephalini that form the “long-headed group,” i.e., discocephalines in which the length of the head is greater than the interocular width. There is no key to the genera of the tribe and no modern treatment of many of the included genera, *Ablaptus* being one such genus. Therefore, diagnoses are given here for the genus and type species. Two new species are added to the previously monotypic genus, one of them from Costa Rica and Panama and the other from French Guiana.

Ablaptus Stål

Ablaptus Stål, 1864:49. Type species: *Ablaptus amazonus* Stål, 1864, by monotypy.

Diagnosis. Length of head about 1.2–1.8 times interocular width. Distance between ocelli about 0.55 of interocular width; distance from each ocellus to nearest eye 0.3–0.4 distance between ocelli. Width of head across eyes 0.6–0.7 basal width of scutellum. Dorsal outline of head before eyes smoothly arcuate, sometimes with slight anteocular concavity (Fig. 2); apices of juga overlapping. Disk of head nearly flat. Antennae each 5-segmented; basal segment nearly reaching apex of head. Bucculae weakly produced anteriorly, more strongly so posteriorly.

Mesial length of pronotum 1.2–1.8 times length of head. Prehumeral disk of pronotum strongly declivent. Scutellum reaching between imaginary parallel lines connecting anterolateral and posterolateral connexival angles of penultimate abdominal segment. Costal angle of each corium lying above last connexival segment. Mesosternum stoutly carinate mesially, lateral halves not tumescent. Metasternum somewhat produced, mesially carinate. Ostiolar ruga on each side extending about 0.75–0.80 distance from mesial limit of ostiole to lateral margin of metapleuron. Ostiole large, crescent shaped, acutely angled mesially. Tarsi 3-segmented.

Sternite 3 (2nd visible) subtuberculate mesially. In male, anterior margins of sternites 6 and 7 projecting cephalad mesially, each forming acute angle, their combined length at meson 0.55–0.70 length of abdominal venter. Tergite 7 of male with mesial process on posterior margin (Figs. 1, 6, 11).

Pygophore extending on each side as long, stout projection set off from remainder of pygophore by suture (Figs. 1, 5, 10); dorsal and ventral pygophoral margins much reduced, genital cup of extracted pygophore entirely visible from dorsal view. Pair

of variously shaped appendages arising from membranous portion of anterior wall of genital cup, one on each side of and adjacent to proctiger.

Comments. The current taxonomic knowledge of discocephalines is so meager that a short diagnosis of *Ablaptus*, sufficient to separate the genus from other described genera of the group, must be accompanied by a caveat as to its infallibility. It appears, however, that *Ablaptus* is distinguished by a combination of subtuberculate third sternite, carinate meso- and metasterna, large ostioles with elongated ostiolar rugae, 3-segmented tarsi, length of basal segment of each antenna (nearly reaching margin of head), lack of anteocular processes and absence of a gibbosity on basal disk of scutellum.

KEY TO MALES OF *ABLAPTUS* SPECIES

1. Ventral margin of pygophore with 3 pairs of processes, middle pair long, digitiform (Fig. 1) *amazonus* Stål
- Ventral margin of pygophore with 1 pair of processes or with none (Figs. 3, 8) 2
2. One pair of processes present on ventral margin of pygophore, these short, acute (Fig. 3) *brevirostrum*, n. sp.
- Ventral margin of pygophore lacking processes (Fig. 8) *tavakiliani*, n. sp.

Ablaptus amazonus Stål

Figs. 1, 2

Ablaptus amazonus Stål, 1864:49–50.

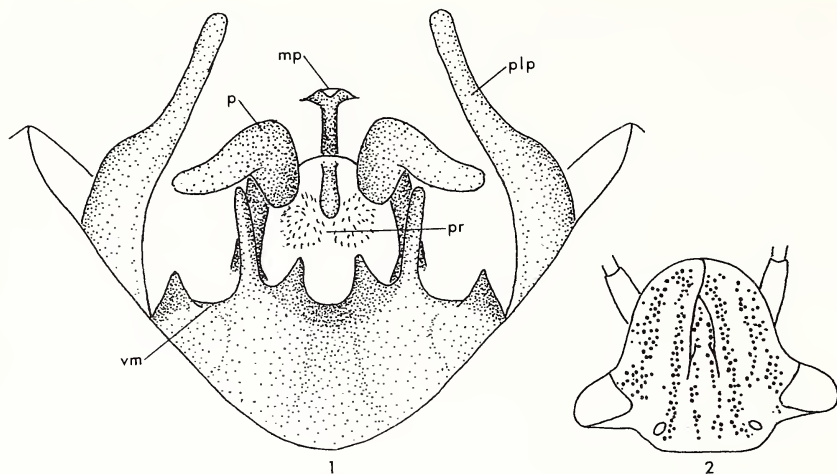
Diagnosis. Antennal segment 4 stramineous except for scattering of dark dots basally. Rostrum reaching nearly to middle of abdominal venter; apex of segment 2 attaining mesocoxae, that of segment 3 reaching metacoxae. Metasternal carina slightly arcuate in profile, truncate posteriorly. Mesial process on posterior margin of tergite 7 long, compressed and expanded apically; lateral corners of diamond shaped expansion spinose.

Three pairs of processes present on ventral margin of genital cup; mesial and lateral pairs subtriangular, and between these on each side a long, digitiform process (Fig. 1). Parameres arched, curving ventrad and laterad, each expanded near top of arch, especially on mesial side, to form inverted, irregularly shaped cup. Mesial carina on proctiger subapical, strong, formed by deep impression on each side; apex of proctiger compressed on each side, densely covered by long hairs. Appendage at base of proctiger on each side bent ventrad, densely fringed mesially with long hairs; fringe covering lateral surface of paramere at base.

Measurements (mm). Length of head 2.8, width across eyes 4.05. Length of segments 1–4 of antennae (5th missing) 1.2, 1.7, 1.9, 3.3, —. Length of rostral segments 1–4 about 1.2, 2.6, 1.9, 1.0. Interocular width 2.25; distance between ocelli 1.2, from ocellus to nearest eye 0.5. Width of pronotum across humeri 9.8, mesial length 3.8. Basal width of scutellum 5.6, length 7.3. Ratio of mesial length to lateral length of sternite 5 in male 15:100, of mesial length of sternites 6+7 to mesial length of abdominal venter 68:100. Length of body excluding genitalia 15.5.

Type. The type, which was examined, is conserved in the Naturhistoriska Riksmuseet, Stockholm, Sweden.

Comment. This species is known only from the type.



Figs. 1-2. *A. amazonus*. 1. Pygophore, caudoventral view. 2. Head. Symbols: mp, mesial process of tergite 7; p, paramere; plp, posterolateral projection; pr, proctiger; vm, ventral margin.

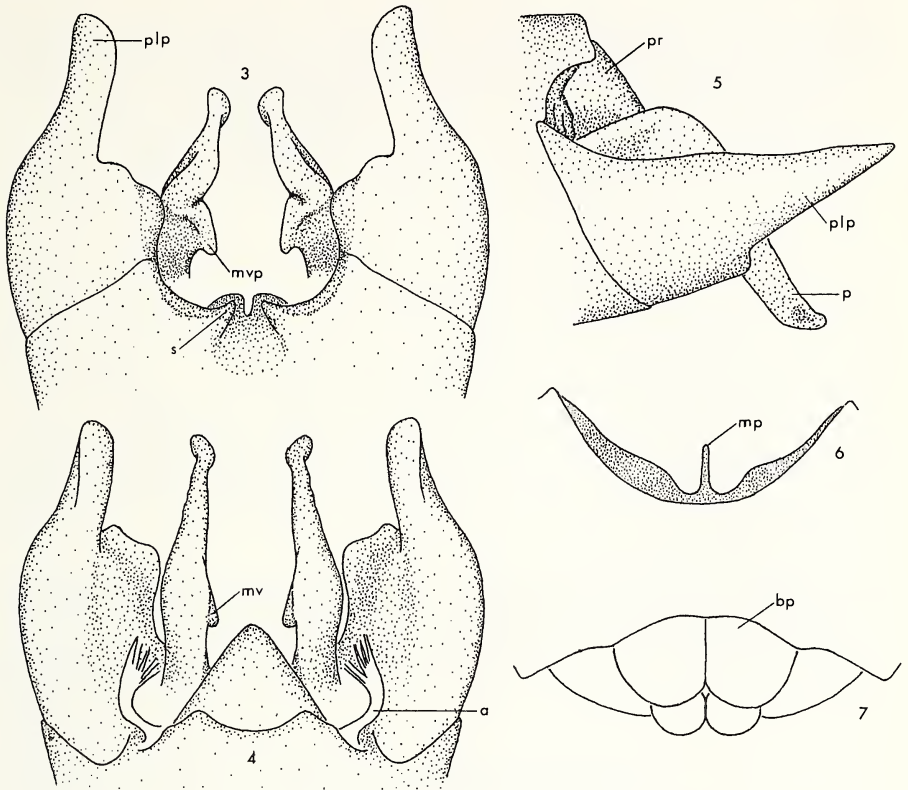
Ablaptus brevirostrum, new species

Figs. 3-7

Description. Dark stramineous above and below with fuscous punctation and fine, rufous specks dispersed over pronotum, scutellum and hemelytra. Head evenly arcuate before eyes in female, with shallow anteocular concavity in male. Punctures scattered in broad band along lateral margins of juga; irregular, narrow band of punctures running along mesial margin of each jugum and continuing across vertex just mesad of corresponding ocellus; line of punctures on each side of tylus also extending across vertex. Disk of head nearly flat. Basal 3 segments of each antenna thickly dotted with fuscous; narrow subbasal ring on segment 4 and basal $\frac{1}{4}$ of segment 5 stramineous, remainder of these segments fuscous. Apex of rostrum reaching base of abdomen; segment 2 reaching middle of mesosternum and segment 3 reaching middle of metasternum.

Humeral angles slightly acute, narrowly rounded, each projecting laterad of corresponding hemelytron by about $\frac{1}{2}$ width of eye. Anterolateral margins of pronotum nearly straight with fuscous, submarginal line becoming marginal just before large, polished, stramineous spot on each humerus. Cicatrices not elevated, matte, partially defined by short rows of black punctures. Punctation thickest behind imaginary transhumeral line and arranged there mostly in irregular, transverse lines.

Fovea in each basal angle of scutellum small, black, composed of a few contiguous punctures; margins of scutellar apex slightly reflexed on each side, narrowly bordered with dark macule. Costal margin of each corium narrowly bordered in black basally; punctures irregularly aggregated on endocorium, forming lines and bands on exocorium; junction with membrane sigmoid, costal angle acute and lying above last connexival segment; membrane fumose with 9-11 simple veins. Connexivum increasingly exposed from segment 3 to 7; color and punctation similar to corium; narrow, black border interrupted near posterolateral angle of each segment.



Figs. 3–7. *A. brevirostrum*. 3. Distal portion of pygophore, ventral view (proctiger omitted). 4. Same, dorsal view. 5. Same, lateral view. 6. Posterior margin of tergite 7 (stippled), ventral view with pygophore removed. 7. Genital plates, caudoventral view. Symbols: a, appendage; bp, basal plates; mp, mesial projection; mvp, mesoventral projection of paramere; p, paramere; plp, posterolateral projection; pr, proctiger; s, spine.

Venter rather uniformly and densely punctate. Ostiole large, crescent shaped; ruga thin, weakly produced. Metasternal carina truncate posteriorly. Legs except tarsi thickly stippled with large, discrete, black dots; tarsi and apex of each tibia suffused with crimson on superior surfaces. Spiracles black, oval, those on abdominal segment 2 (first visible) partially or completely exposed. All trichobothria located laterad of imaginary band connecting spiracles on each side and continued to abdominal apex.

Mesial projection on posterior margin of tergite 7 of male spinose, about 0.9 mm long; posterior margin of tergite 7 shallowly concave on each side of projection (Fig. 6). In male, a pair of small, apically convergent spines lie within concavity on ventral border of pygophore (Fig. 3). Posterolateral pygophoral projection on each side narrowing abruptly about $\frac{2}{5}$ distance from suture separating projection from remainder of pygophore and apex of projection (Fig. 5). Parameres arched, curving ventrad, slightly retrorse toward apex, each with obtuse basal tooth and larger, obtuse pro-

jection on mesoventral surface where paramere bends ventrad; inferior surface of paramere concave between these projections (Figs. 3, 4). A long, curved appendage bearing tuft of long hairs apically arising on each side at base of proctiger. A blunt, subapical and subventral projection covered with long hairs present on each side of proctiger. In female, only paratergites 8 and 9 and basal plates visible (Fig. 7).

Measurements (mm). Measurements of holotype with those of paratype in parenthesis. Length of head 2.6 (reflexed and unmeasured in paratype), width across eyes 3.9 (3.7). Length of segments 1–5 of antennae 1.1, 1.9, 1.7, 3.0, 2.8 (1.0, 1.9, 1.9, —, —). Length of rostral segments 1–4 about 1.3, 2.2, 1.7, 1.0 (1.1, 2.0, 1.6, 1.0). Interocular width 2.1 (2.3); distance between ocelli 1.2 (1.2), from ocellus to nearest eye 0.4 (0.5). Width of pronotum across humeri 10.4 (9.9), mesial length 4.3 (4.1). Basal width of scutellum 6.1 (5.9), length 7.5 (7.1). Ratio of mesial length to lateral length of sternite 5 in male 25:100, of mesial length of sternites 6+7 to mesial length of abdominal venter 62:100. Length of body excluding genitalia 15.3 (15.4).

Types. Holotype, male labeled (a) "Turrialba, C. R., 20 VI '48, F. Schrader, 583" and (b) (red label) "*Ablaptus brevirostrus* H. Ruckes, HOLOTYPE." Paratype, female labeled (a) "B. C. I. Panama, 29 V '57, F. Schrader, A118" and (b) (red label) "*Ablaptus brevirostrus* H. Ruckes, ALLOTYPE." Both specimens are deposited in the American Museum of Natural History.

Comments. During the course of his work on discocephalines, the late Professor Herbert Ruckes recognized several new taxa, which he left undescribed. As indicated by the labeling of the type series, this species is one of those taxa.

Schrader (1960) included this species, misidentified for him as *A. amazonus*, in a cytological study of the "harlequin lobe" found in the testis of many pentatomid species.

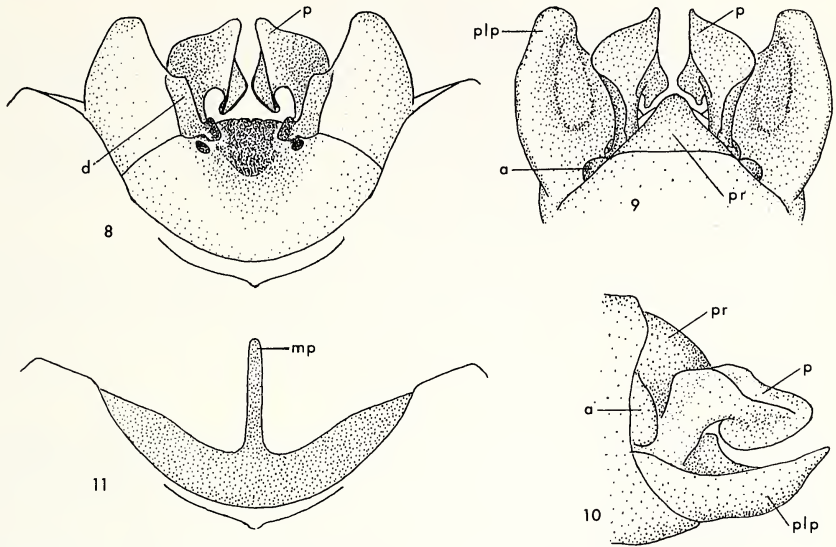
***Ablaptus tavakiliani*, new species**

Figs. 8–11

Description. Similar in appearance to *A. amazonus* but differing as follows. Antennal segment 3 dotted with fuscous on basal half, a few fuscous dots at base of segment 4, segments 3 to 5 otherwise immaculate. Rostrum reaching anterior margin of sternite 4 (3rd visible); apex of segment 2 reaching mesocoxae. Short, fuscous mark on anterolateral pronotal margin just before each humeral angle, another on posterolateral margin, the two marks separated. Humeri punctate, without large, polished spot at each humeral angle. Black, mesial macule present on basal disk of scutellum; margins of scutellar apex not reflexed, lacking macules. Connexiva little exposed. Endocorium of each hemelytron heavily suffused with rufous.

Most punctures on venter rufous. Lateral half of each side of abdominal venter finely and very densely dotted with rufous.

In male, mesial projection on posterior margin of tergite 7 digitiform (Fig. 11). Ventral pygophoral surface mesially concave distally, the concavity black distally and with a dark castaneous, oval spot on each side near base of posterolateral pygophoral projection; each projection with step-like depression basally on mesial margin (Fig. 8); mesodorsal surface of each projection concave with teardrop shaped excavation (Fig. 9). Each paramere expanded laterad and ventrad subapically, forming flattened, approximately triangular superior surface and cusped mesial surface with



Figs. 8–11. *A. tavakiliani*. 8. Pygophore, ventral view. 9. Distal portion of pygophore, dorsal view. 10. Same, dorsolateral view. 11. Posterior margin of tergite 7 (stippled), ventral view with pygophore removed. Symbols: a, appendage; d, depression in posterolateral projection; mp, mesial projection; p, paramere; plp, posterolateral projection; pr, proctiger.

arcuate ventral margin (Figs. 8, 9, 10). Proctiger conical from dorsal view. Appendage arising on each side of genital cup (from membranous anterior wall) compressed, posteriorly arcuate, appearing as conspicuous plate from dorsolateral view (Fig. 10).

Measurements (mm). Length of head 2.50, width across eyes 3.45. Length of segments 1–5 of antennae 0.9, 1.4, 1.5, 2.4, 2.4. Length of rostral segments 1–4 about 1.1, 2.0, 1.4, 0.8. Interocular width 1.8; distance between ocelli 1.0, from ocellus to nearest eye 0.35. Width of pronotum across humeri 7.8, mesial length 3.0. Basal width of scutellum 4.9, length 5.7. Ratio of mesial length to lateral length of sternite 5 in male 35:100, of mesial length of sternites 6+7 to mesial length of abdominal venter 54:100. Length of body, excluding genitalia 11.5.

Type. Holotype, male, from French Guiana, labeled “Roura, 23.VII.1981. G. Tavakilian, Collection O.R.S.T.O.M.” Illegible symbols precede the date on the label. Deposited in the Museum National d’Histoire Naturelle, Paris.

Comments. This species is named for the collector, Gerard Tavakilian.

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